

# **MODIS TECHNICAL TEAM MEETING**

**November 10, 1994**

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present were Locke Stuart, Dick Weber, Bill Barnes, John Bauernschub, Ed Masuoka, David Herring, Bruce Guenther, John Barker, Yoram Kaufman, Joann Harnden, and Harry Montgomery.

## **1.0 SCHEDULE OF EVENTS**

<b>Nov. 1</b>	<b>Revisions of ATBDs receiving a grade of A or B due to EOS Project Science Office</b>
<b>Nov. 1</b>	<b>Beta code delivery due to SDST</b>
<b>Nov. 29</b>	<b>SCAR B and C meeting at GSFC, at 8:15 a.m. in Building 22, Room 365</b>
<b>Dec. 12</b>	<b>MODIS Quarterly Review at GSFC</b>
<b>Dec. 31</b>	<b>Revisions of ATBDs receiving a grade of C or D due to EOS Project Science Office</b>
<b>Jan. 15, 1995</b>	<b>Semi-annual reports due to Barbara Conboy</b>
<b>Jan. 24 - 25, 1995</b>	<b>MODIS Ocean Discipline Group Meeting, in Miami, FL</b>
<b>Jan. 26 - 27, 1995</b>	<b>Workshop on international Calibration/Validation Efforts for EOS Ocean Color Sensors, in Miami, FL</b>
<b>May 2, 1995</b>	<b>MODIS Calibration Working Group (tentative)</b>
<b>May 3 - 5, 1995</b>	<b>MODIS Science Team Meeting (tentative)</b>

## **2.0 MINUTES OF THE MEETING**

### **2.1 EOSDIS Project Reorganization**

Salomonson announced that EOSDIS Project has been reorganized. Dale Harris is now the Associate Director for ESDIS (project manager) in the Mission Operations and Data Systems Directorate (he is a very experienced Project Manager; e.g., he lead the TDRSS Project for some time), with John Dalton as Deputy Associate Director for ESDIS (associate project manager). H.K. Ramapriyan (Rama) is responsible for science interactions and algorithms. Ellen Herring is in charge of system engineering/management. Mel Banks is responsible for ESDIS systems development. An A. Kelly is the missions operations manager and a person named G. Barth is in charge of ESDIS/resources/finances.

### **2.2 MODIS Project Reports**

Weber announced that his trip to El Segundo has been delayed a couple of weeks. He reported that Lee Tessmer now feels that it may be appropriate to delay SBRC's move to El Segundo until after the MODIS protoflight model is

completed. Tessmer adjusted his thinking because there is some uncertainty as to how soon the clean rooms will be ready at the Hughes facility in El Segundo. Estimates range from 5 months to 7 months, to more than 1 year.

Salomonson asked if the scattered light problem in MODIS is indeed less severe than originally thought. Weber responded that Gerry Godden thinks so. He added that tests indicate that light reflecting off of the solar array seems to not be a problem. Guenther interjected that he is not convinced of that, and stated that more details are coming next week.

Weber reported that SBRC is now losing MODIS personnel more rapidly—mostly programmers, and those best able to find other jobs quickly. He is concerned that SBRC is losing some critical people.

Weber reported that the thermal vacuum chamber will arrive at SBRC this week. They hope to install it and begin initial pumping within a few days. Weber said he just received an engineering drawing of SBRC's tilt table for MODIS.

### **2.3 MCST Reports**

Guenther announced that he is attending a meeting Tuesday morning to discuss spacecraft maneuvers for viewing the moon.

Montgomery suggested sending a contractor who is a software developer from GSFC to SBRC to learn and document SBRC's MODIS software system. Barker strongly agreed and added that perhaps GSFC should send two people.

### **2.4 SDST Reports**

Masuoka reported that Bob Price's MODIS software readiness review for the EOS project will occur in January rather than December. Personnel from NASA HQ will attend the review which will be organized by the AM Project, EOSDIS, and the Mission to Planet Earth Office.

Masuoka stated that EOSDIS is carrying a baseline allocation of 3.5 GFLOPS for the production of all products for AM-1 and TRMM. The MODIS portion of the allocation was 1,200 MFLOPS. Masuoka said Steve Wharton thought that EOSDIS may be able to increase the overall allocation, and that Wharton will work to get the overall MFLOPS in EOSDIS increased. However, he added that Wharton has asked the MODIS Team to provide a plan for what we will do to make MODIS products with the proposed allocation of 1,200 MFLOPS and that the Team should identify the science impact of the allocation on the MODIS community.

Barker asked if EOSDIS' concept now is to only do Level 1 processing for the first two years after launch. Masuoka responded that this was the current MODIS answer. Barker is disappointed that we have gone from the notion of EOSDIS providing 7 times the processing capacity to produce EOS data at each level, to

arguing over whether we will even have enough horsepower to process the Level 1 data only once. Masuoka stated that in the long run, EOSDIS will address those needs—Wharton is looking for a way to quantify what they are. For now, EOSDIS needs a “bogey” for which to plan the Preliminary Design Review (PDR). At the PDR, EOSDIS presumably will understand that they need a bigger number. Masuoka stated that he was developing a strawman approach to producing most of the MODIS product set within this allocation. Salomonson asked Masuoka to develop a number of scenarios for the MODIS Science Team Discipline Leaders to consider in responding to Wharton's request to quantify impacts of the allocation.

## **2.5 Simulation Data**

Harnden reported that she is now working with Al Fleig on plans for data simulation for MODIS. She is working with data sets from MODIS heritage instruments, such as AVHRR.

## **2.6 SCAR C and B Meeting**

Kaufman reminded the team that there will be a SCAR (Smoke, Clouds, and Radiation) C and B meeting on Nov. 29 at GSFC. He said the prospects for conducting a SCAR B campaign are looking much better. He added that now there is also a good possibility that the ER-2 will fly as part of the campaign.

## **2.7 MAST Reports**

Herring said planning will soon begin for the next MODIS Science Team Meeting and asked for suggestions of possible sites. The Team generally agreed that Annapolis, MD, would be a good site.

Herring asked the Team to begin thinking of topics for discussion at the next meeting, as well as persons to moderate those discussions. Any suggestions should be forwarded to [herring@ltpsun.gsfc.nasa.gov](mailto:herring@ltpsun.gsfc.nasa.gov).

# **3.0 ACTION ITEMS**

## **3.1 Action Items Carried Forward**

1. *MODIS Team*: Determine how, given the MODIS bowtie effect, MODIS images will be produced at launch. [This may be a suitable topic for discussion at the next Science Team Meeting.]
2. *Fleig and Ungar*: Interact with the group leaders prior to developing a MODIS data simulation plan for review at the next Science Team Meeting. [Work on this item is still in progress.]
3. *Masuoka*: Develop a strawman plan for dealing with the baseline MODIS allocation for review by the MODIS Science Team.